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ABSTRACT

The postsecondary educational experiences of black and white high school graduates who entered college between 1972 and 1974 were studied, with a focus on the effects of institutional characteristics on students. Data were obtained from the National Longitudinal Study of the high school senior class of 1972 for entrants to two- or four-year colleges in academic curricula. It was found that high school, race, and academic preparation strongly affected college selection by blacks, while socioeconomic status (SES) and goals were more important in the college selection by whites. Differences in effects of colleges on grades, faculty contact, satisfaction, and attainment variables were also explored. Compared to black students attending predominantly white colleges, black students attending predominantly black institutions received significantly higher average grades, and were more likely to persist for a second year and to obtain a bachelor's degree. In general, the attainment of black students was higher in black colleges that were privately-controlled, smaller, less vocational, more cohesive, and with low-SES students. Contact with faculty also seemed highly important for black students. Additional findings are discussed. (SW)

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Race Differences in the Effects of College Characteristics on Educational Attainment*

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Abstract

This study analyzes the postsecondary educational experiences of black and white high school graduates who entered college between 1972 and 1974. The focus is on the effects of the basic type of institution and specific institutional characteristics on students. It first investigates processes of selection into colleges for blacks and whites, and finds that high school race, and academic preparation strongly affect college selection of blacks, while SES and goals are more important for whites. Differences in effects of colleges on grades, faculty contact, satisfaction, and attainment variables are also explored. In general the attainment of black students is higher in black, privately controlled, smaller, less vocational, more cohesive, low SES composition colleges. Contact with faculty also seems highly important for black students.

Introduction

This study examines the effects of college type and characteristics for black and white entrants to college in the early 1970's. Many studies have shown that blacks and whites enter different kinds of postsecondary institutions, and that the processes through which they are selected/recruited into institutions with different characteristics also differ. However, few studies have explored the issue of differential effects of these institutions on the academic performance and educational attainment of black and white students. The study uses data from the National Longitudinal Study of the high school senior class of 1972, and analyzes the patterns of attainment for those students who entered college between 1972 and 1974.

Review of Literature

A Number of studies indicate differences in the determinants of black and white educational performance and attainment. Race differences in reactions to background and educational environments seem to exist at all levels of the educational system. At the secondary level, studies have generally found that high school performance, measured ability, and socioeconomic status have weaker effects on the educational goals, later academic performance, and attainment of black than white students. On the other hand, "ambition", disciplinary problems, "nonconformity", self-esteem, and educational aspirations seem to have stronger effects on black attainment (Kerckhoff and Campbell, 1977; Porter, 1974; Portes and Wilson, 1976; DeBord, Griffin and Clark, 1977). Studies at the secondary level have also found both main and interaction effects of school-level variables. Black students in integrated schools seem to have aspirations which are more closely tied to ability (i.e, more "realistic"), along with lower grades, lower odds of being in a college prep curriculum, lower academic self-concepts and educational goals (Hoelter, 1982; Eckland and Alexander, 1980). Black students in high ability composition schools tend to have lower grades, college plans and attainments, as do white students; however, high socio-economic composition also lowers curriculum placement, educational goals, and academic self-concept of black students, but not white students. High SES contexts may, however, help black students by providing greater teacher/counselor encouragement of college attendance (Eckland and Alexander, 1980). Wilson (1979) reports that blacks in integrated and middle class schools had more predictable attainment than those in segregated schools. SES and pacing (being held back or skipped a grade) had stronger effects on attainment in integrated and higher SES settings.

Postsecondary Education.

Selection into Colleges by Race. There is quite a bit of evidence of basic black-white differences in where students go to college. Black students are more likely than whites to enter less selective, lower quality, two-year, predominantly black and private institutions. Controlling for other background factors, however, blacks and whites differ to a lower degree, and some differences are reversed. Controlling socioeconomic status and ability, some studies have found that blacks are less likely to enter two-year colleges and low selectivity public colleges. Hearn (1984) found that, controlling for SES and achievement factors, black students entered colleges higher in expenditures per student and costs, but lower in selectivity.

Studies have also examined the determinants of where blacks go to college. Braddock (1979) found that black attendance at desegregated high schools decreased significantly the odds blacks would choose to attend black colleges. This effect on college choice was nearly as important as those of high school grades and college cost. Eckland and Alexander, summarizing

studies done with the NLS data, report that in the South, the percent black in the high school did significantly increase the odds of black student entry to a "traditionally black" college, but that it did not affect the selectivity level of other institutional choices. The best predictors of entering a traditionally black institution (TBI) were college preparatory curriculum in high school and low measured ability. The studies also found that blacks were more likely to go to four-year colleges and more selective institutions. The best predictors of selectivity for blacks were region, ability, science coursework, and high school grades. For whites, the best predictors were measured ability, high school grades, region, SES and language coursework.

Astin and Cross (1981) found that blacks in predominantly white insitutions (PWI) were slightly more likely to have been in college preparatory programs in high school, and had higher high school grades, though they did not feel better prepared for college once enrolled. The students in PWI's also had chosen colleges closer to home, and were most likely to have chosen their institutions because of the availability of financial aid and active recruitment by the college. Students in black colleges tended to have applied only to the college they attended, were further from home, and had chosen their college because of the influence of relatives, teachers or friends.

Overall, black students were less objectively well-prepared for college than white students, thought they felt better prepared in most areas. They also were in colleges closer to home, had lower parental education and income, and more financial concerns about college. Cross and Astin (1981) also found that black students were more likely to receive financial aid, got more aid, and received that aid more often in the form of a package including loans, grants and work-study employment.

Experiences in Postsecondary Education.

A number of studies have focused, as at the secondary level, on effects of college racial composition. Bayer (1973) found that black students at traditionally black schools were more likely to aspire to graduate training, though less likely to aspire to professional occupations than those at predominantly white schools. Dawkins and Braddock (1982) report that the positive effects of college activities, satisfaction, and grades on attainment are stronger in traditionally black than white schools. Braddock and Dawkins (1981) have found that predictors of attainment of black students vary somewhat by both predominant race and level (two-year versus four-year) of the institution. For example, ability and high school curriculum were significant only in two-year black schools, while SES was important only in four-year black schools. Percent white seemed to be more important at four-year than two-year schools. Overall, the explained variance using ability, high school grades and curriculum, study habits, percent white, and SES was greater in black than white scools. Smith and Moore (1983) found that achievement of black students is higher in small, high quality colleges, while "adjustment" is better in larger, lower quality colleges. For achievement in college, high school grades, mother's occupational status, gender, and financial aid were also important for black students. Pfeifer (1976), looking at more interpersonal aspects of colleges, found that impersonal, "academic" atmospheres have positive effects on the performance of whites, while nonacademic atmospheres and perceptions of personal racism by fellow white students had positive effects on performance of black students. Dawkins and Dawkins (1980), on the other hand, report that performance of black students was positively affected by contact with whites and negatively affected by perceptions of prejudice. Gurin and Epps (1975) found that higher faculty-

student interaction, and an academic stress in the student culture had positive effects on the occupational and educational goals of black students in black colleges.

Cross and Astin (1981) analyzed the determinants of black persistence, though they do not present comparative white analyses. They found that higher odds of persistence for blacks were associated with higher high school grades, being at a predominantly black institution, being more involved in campus life, and having higher self-confidence in ability. Lower odds of black persistence were associated with being employed over 20 hours a week, having large educational loans, perceiving a lack of parental support, and having feelings of loneliness or boredom at college. Gosman et al (1983) also found higher rates of early progression, persistence, and graduation for predominantly black college students and for being in the minority (black in white college).

It is clear from an analysis of the literature, that we lack much information about the relative effects of different determinants of student performance and attainment by race. The studies on higher education in particular are inadequate (as a group). Many of the studies compare only a small number of institutions which vary simultaneously on a variety of characteristics. Other studies use only black students in differing institutions. These do not allow us to assess whether similar processes of institutional effects operate for both blacks and whites. Many studies lack adequate measures of both background and other pre-college influences, and of institutional variables.

This study is a preliminary analysis of how black and white college students in the early 1970's fared in a variety of postsecondary institutions. It explores the following questions:

1. Are there institutional characteristics which are particularly important in helping black students to perform adequately, persist, and graduate from college?
2. Is black performance, persistence, and graduation particularly dependent on institutional characteristics.
3. Are integration into college life, faculty support, and avoidance of conflicting roles more important for black students?
4. Are the kinds of institutions blacks predominantly enter, and the kinds of college experiences they have those that are most advantageous?

The data used include sufficient controls for individual background variables, a number of specific institutional characteristics, and information about student experiences during college, as well as on educational outcomes.

Methods

Sample.

This study uses a subset of the National Longitudinal Study of the High School Class of 1972 . Only entrants to two- or four-year colleges, in academic curricula (see Eckland et al, 1979 for operationalization), by the Fall of 1974 are included. In addition, only respondents to at least the base-year and first follow-up surveys are utilized. The resulting maximum number of cases for analysis is 7376. This includes 795 blacks and 6581 non-blacks.

Missing data were replaced with the mean of the data-present distribution. According to Cohen and Cohen (1975), this procedure allows one to maintain a maximum case base for analyses, while specific parameter estimates are based only on the data-present cases. In general this is a conservative procedure, which attenuates standardized parameter estimates due to the decreased variances of variables. It does not affect unstandardized

statistics. Response rates for the follow-ups have been quite high, and are probably higher for college attenders than other groups (see Levinsohn et al, 1978 for description of follow-up procedures and specific response rates). Analyses of patterns of missing data on individual variables did not reveal serious biases. Results using listwise and pairwise deletion methods showed essentially similar results. In fact, as expected, results using listwise deletion gave stronger regression coefficients and more significant effects for most variables.

Measurement of Individual Student Variables. A composite measure of SES was used. It is composed of an equally weighted sum of standardized scores for father's education, mother's education, father's occupational prestige, family income, and household possessions (SES). Gender is a dummy variable (MALE), with males 2 and females 1. Three measures of academic preparation are used. Ability (ABIL) is the standardized sum of scores on the reading, letter groups, math, and vocabulary subtests given with the base-year questionnaire. High school program (HSPGM) is a dummy variable contrasting non-college (2) with college preparatory (1). High school achievement (HSGPA) is a measure of average high school grades from school records. Educational plans (EDEXP) refers to the level of education the student expected to attain. Occupational aspirations (OCASP) are measured by the Duncan SEI score for the occupation the student wanted to enter. A measure of academic self concept (ACSC), refers to the student's confidence in ability to do well in college. Finally, a measure of parental aspirations (PASP), constructed by averaging student reports of the level of education desired by mother and father was used. HSRACE is an indicator of the percent white in the students high school. It is used only for blacks. Analyses including it for whites as well showed no substantial differences in the model.

A final control variable is necessary because of the inclusion of both immediate, coded as 2, and delayed (1973 to 1974), coded as 1, entrants. Studies have shown that determinants of educational performance and attainment are similar for the two groups (especially when the delay is only one or two years), but it is necessary to control for the main effects of delayed entry on outcomes. Delayed entrants were included in order to increase the number of minority and lower SES students represented.

Post-high school role involvements. Four factors dealing with individual level of involvement with the student role and other potentially competitive roles are included as controls in a second stage. Marital status (MS) is a dichotomy for currently married or not at the time of entry to college. Hours of employment (HRS) is the number of hours per week worked in October of the year of college entry. Residence on-campus (2) or off-campus is also a dichotomy (RES). Unfortunately, the only measure of residence is for the time when the respondents received the first-followup instrument (1973 for most). Thus this measure is not entirely appropriate for those who entered college in 1972. Probably those living on-campus in 1973 also did so in 1972. But the opposite is not true. Those living off-campus in 1973 may have lived on-campus in 1972 but have dropped out by 1973. Because of these problems, the residence measure is not used in the analysis of persistence to the second year, though it is used for later periods. It is defined as missing in these analyses for those students not enrolled in the fall of 1973. Analyses excluding it in all equations show little effect on other parameter estimates. Finally, a measure of full- versus part-time attendance in the first year (FTPT) is used.

Intervening college experience variables. Three measures of the experiences of students in the college setting are included. College academic

performance (GPA) refers to average grades in the first year of college Faculty contact is a dichotomy of whether the students report they know a faculty member well enough to ask for a letter of reference or recommendation (FAC). Overall level of satisfaction with college experiences (CSAT), is determined by average ratings of several aspects of the college and one's life there, on a one to five scale.

Educational Outcomes. The primary concern of this research is with effects of college experiences on traditional educational attainment. It does not look at vocational education, or other nontraditional training. The first outcome measures whether the student persisted for at least one year in an academic program in a two or four-year college (P2). Again, this does not refer to persistence in the same college, only to persistence in some academic program in any college. The second outcome measure is attainment of a bachelor's degree (BA) by 1979 (seven years after high school). The last measure used is that of academic educational goals (ED79) . It measures the level of college education the respondent expected to complete, and it is taken from the 1979 questionnaire. Through this one can see if long term plans for education are as greatly affected as early attainment levels.

College Variables. College-level data were obtained by merging two machine-readable files of institutional data (Carroll, 1979; Tenisor, 1976) with the NLS data, by matching of F.I.C.E. codes for institutions. Thus the college data are not obtained by aggregating data from the NLS sample, but are taken directly from institutional records. All college variables refer to the first college (from 1972 to 1974) attended by the student. The following measures were used in analyses:

1. A set of dummy variables for private university (PRU), private four-year college (PR4), private two-year college (PR2), public university (PUBU), and public four-year college (PUB4) compared to public community colleges as the omitted comparison group was used. Four-year colleges are those offering at least four-years of post-high school work, granting baccalaureate or equivalent degrees. Universities are those with considerable emphasis on graduate instruction, with at least two professional schools not exclusively technological in character. Two-year schools are those offering only associate degrees, certificates, and diplomas, below the baccalaureate level.
2. Race of college - coded 2 for a predominantly black, and 1 for predominantly white institution.
3. Selectivity - mean SAT score of freshmen class (SAT).
4. Percent of students with family income less than 6,000 (LSES).
5. Total opening fall enrollment, undergraduate and graduate (SIZE).
6. Percent of all students enrolled part-time
7. percent of all majors offered in vocational areas, with vocational defined as any area other than liberal arts and natural sciences/mathematics. This includes areas like business, engineering, education, trades, and other applied programs (PVOC).
8. Educational/general expenditures per student (EXP).

These indicators were chosen on the basis of exploratory factor analyses of a larger set of college characteristics. Factor analyses showed four basic factors. The first has a positive loading for percent living on campus and negative for vocational majors and percent part-time (a social integration factor). A second has positive loadings for size, number and diversity of major areas, corresponding to a theoretical factor of bureaucratization and

complexity. The third factor has high positive loadings for percent graduate students, expenditures, cost, and average SAT. This sounds closest to what is generally termed "quality". The fourth factor has a lower positive loading for average SAT scores, and negative loadings for the percent of low-income students, and percent minority group students. It thus corresponds best to a general socio-economic compositon factor. On the basis of this, variables were chosen to represent each factor. In addition, other variables were selected on the basis of earlier regression results and/or theoretical interest.

Results

Examination of simple black-white differences in the means of the college variables indicates that blacks and whites do enter different kinds of postsecondary institutions. Blacks are somewhat less likely to be in public and private community/junior colleges, and more likely to enter public and private four-year colleges than whites. Blacks are less likely than whites to enter universities. The institutions blacks attend are smaller, with lower SES and ability composition, and slightly more part-time students and vocational major areas. Despite this, expenditures per student are marginally greater than for whites. Almost a third of the black students are in predominantly black institutions.

Analyses using race as a dummy variable in a regression equation including the socioeconomic and academic control variables used in this study indicate the extent to which race affects college selection net of other factors. These results show positive effects of being black on educational expenditures, tuition/fees cost, degree level (university/four-year/two-year), private control. Negative effects were found for socio-economic composition, proportions of half-time and commuter students, vocational orientation, and selectivity.

Table 1 examines whether there are also different patterns of selection into postsecondary institutions for blacks and whites. Because of the very small number of whites in predominantly black institutions, this variable is eliminated from all analyses for whites. However, the analyses do show that the main determinants of black entry into black rather than white colleges are the racial composition of the students' high schools and whether they delayed entry to college. As others have found, those who attend predominantly black high schools are also more likely to attend black colleges. Black colleges are also less likely to be selected by delayed college entrants.

Black student entry into more academically selective colleges depends most on ability and high school curriculum --achieved factors. For whites, on the other hand, college selectivity is dependent on SES, goal orientations, and parental aspirations. In addition, while delayed entry is not associated with selectivity for blacks, white delayed entrants enter less selective schools. Race differences are much the same for SES composition; for blacks, measures of academic preparation and high school race are significant, while for whites, SES and occupational plans are significant. Black entry into more vocationally oriented colleges is tied to academic preparation (especially curriculum), educational goals, and delayed entry. For whites, these factors are less important, and SES and parental aspirations are more important. Selection into colleges with high expenditures per student is tied only to ability for blacks, while for whites a range of other factors are important: SES, gender, and high school grades. Going to a large college is tied more closely to SES for blacks, and to ability for whites. In addition, high school preparation, goals, and parental aspirations are more influential for whites. Finally, entry to a college with high part-time enrollment is linked

significantly to SES for whites but not blacks. In addition, measures of academic preparation, parental aspirations and high school racial composition are generally more important for whites.

Generalizing across all college characteristics, it is clear that SES is a more potent influence on where white students go to college than is the case for blacks. Ability and high school curriculum tend to be more important in the routing of black students into collges, while high school grades are more important for whites. Parental aspirations also seem more influential for whites. Individual goal orientations vary across the specific college variables being analyzed, with no apparent trend to race differences. Background characteristics and delayed entry explain anywhere from 3% to 18% of the variance in college characteristics. The variables in the model are superior in explaining college selectivity, SES composition, and percent of part-time students. Explained variance in vocational orientation and expenditures is greater for blacks than whites.

Table 1 Here

Table 2 shows the effects of college type and characteristics on measures of academic performance, contact with faculty and college satisfaction.

Academic performance. Black students who enter predominantly black institutions (PBI) receive significantly higher average grades in college. Both black and white students get the highest grades in two-year colleges, and the lowest grades in public universities. White students in public colleges, and private colleges and universities receive quite similar average grades; for black students, both four-year college settings result in lower grades than private universities. In addition, black student receive particularly low grades in public universities.

For white students, public colleges and universities remain significantly lower in grades, even controlling for specific college characteristics. In addition, we see positive effects on grades of college size, percent of low SES students and percent of part-time students. That is, white students get their best grades in large schools with low integration and low SES composition. Only low SES composition increases black grades significantly. The effects of SES composition are maintained for both groups, even controlling student role involvement, and the positive effect of college size for whites is also maintained.

In this early college period, marital status, employment and off-campus residence are not significant impediments to high grades. Part-time attendance is in fact a positive determinant of grades for white students.

The individual control variables and college type explain more of the variance in white than black college performance. However, college characteristics increase explained variance proportionally more for blacks than whites.

Faculty contact. The admittedly poor indicator of contact with faculty is not responsive either to student background or basic institutional type for black students. For whites, there is a basic public/private division. All private institutions, especially at the two- or four-year level, are higher in faculty contact for whites. For whites, contact with faculty is also linked to smaller college size and lower proportions of part-time students. While size is not as influential for black students, going to a college with many part-time students is particularly damaging for blacks. While the effect of part-time composition is explained away by differences in individual role involvement for whites, this is not the case for black students. Size of collge, on the other hand, remains influential for whites.

Overall, being a full-time student, living on-campus, and getting higher

grades increases contact for both groups, but to a greater degree for whites than blacks. A negative effect of employment is also seen only for white students. Finally, blacks who enter PBI are not significantly higher in faculty contact, when controlling for other college characteristics and role involvements.

College satisfaction. For whites, the basic college type does influence subjective integraton into college life. Students in public college and university settings are significantly less satisfaied than those in two-year and private college settings. The most satisfied groups is students in private two-year coleges. For blacks, none of the basic institutional types varies significantly in satisfaction level of students. Specific college characteristics do however vary in their effects for blacks and whites. White student satisfaction is increased by entry to colleges with low SES compositon and few part-time students (such as unselective liberal arts colleges?). Black students are least satisfied at colleges with low SES composition, as well as those with high ability composition. Furthermore, while white student satisfaction depends on campus residence, faculty contact, and grade performance, only grades seem important for black student satisfaction.

Table 2 Here

Table 3 shows the basic findings of the study: the total and direct effects of colleges and college experiences on educational attainment and goals.

Persistence to the second year. Black students are more likely to remain in college for a second year when they enter predominantly black coleges. Besides this, other institutional types do not vary significantly from each other. Note however, that for both blacks and whites, all types have higher persistence rates than public community colleges.

Black students are negatively affected by entering colleges with a vocational emphasis, and with many part-time students. These negative effects exist independent of individual student experiences. On the other hand, only part-time composition reaches significance for whites, and its effect can be attributed to differences in role involvement at the individual level. In addition, for whites all the student role involvement factors are significant: not being married, not working many hours, and being a full-time student. In addition, whites are more likely to persist if they have higher grade averages, more faculty contact, and higher satisfaction. For black students, only faculty contact is a positive and significant factor in early persistence.

Bachelor's degree completion by 1979. At the point of the fourth follow-up of the NLS cohort , even the delayed entrants have had five full years to complete a bachelor's degree. Those who entered in 1972 have had seven years. While some students will undoubtedly finish after 1979, most of those who will ever receive a degree should have done so within this period (Eckland, 1964; Campbell, 1980). Results indicate that blacks who enter black colleges, or private colleges and universities have higher degree completion rates. Only the percent part-time students has a significant effect, out of the specific college variables, though the negative effect of size is nearly significant. These college effects are primarily explained by the differential role involvement and experiences of students. Black students who live on-campus, who get higher grades, and who have better contact with faculty have higher completion rates. Living on-campus and faculty contact seem particularly important for blacks. For white students, all college types are superior to community colleges -- even the private junior colleges. In addition, privately controlled institutions have higher completion rates than

public schools, especially public universities. This is even true when controlling for other college variables. Expenditures, vocationalism, and part-time composition have significant negative effects on white degree completion, while selectivity has a positive effect. These effects remain even when controlling for role involvement. However, employment, part-time attendance, living off-campus, low grades, low faculty contact and dissatisfacton are all significant determinants of degree completion. Note that college grades are more influential than faculty contact or satisfaction, while for blacks faculty contact is the most important aspect of experiences.

Educational goals, 1979. For black students, educational goals are enhanced by entry to a private university or college or a public college, rather than to a public university or community college. Private settings in general lead to higher goals than equivalent public colleges. This in the equation, with a particular advantage for private universities. Only part-time composition has a negative effect on black educational goals, while academic performance and faculty contact have positive effects. Once again, for blacks faculty contact seems more important than objective evidence of success in college.

For white students, all private colleges lead to higher goals than similar public colleges. As with black students, private universities retain an advantage not explained by specific college characteristics. In addition, for whites, higher goals are encouraged by entry to a large and non-vocationally oriented setting. For whites, role involvements are also significant, though they are not for blacks. Greater employment levels in college and being only a part-time student lower educational goal levels. As with degree completion, grades, faculty contact and satisfaction are all positive influences on goals for white students, with grades being the most influential. On the other hand, for black students, faculty contact is the most influential of the three.

Table 3 Here

Summary and Conclusions

Race differences in the effects of colleges. First, black students who enter predominantly black institutions have some advantages over other black students: they receive significantly higher average grades, are more likely to persist for a second year, and to obtain a bachelor's degree. However, this advantage can primarily be traced to the low SES composition of the colleges, combined with low proportions of part-time students. Differences between students in different categories of the college typology are quite similar for black and white students. Those in two-year colleges receive the highest average grades, but overall have the lowest odds of persistence and graduation, and the lowest educational goals by 1979. In general, the two-year versus four-year differences are even greater for black students. Among the four-year colleges and universities, students in public institutions receive the lowest grades; this is true for both blacks and whites, but again the difference is greater for blacks. While the differences do not reach significance for blacks, public institutions also negatively affect faculty contact and satisfaction of both groups.

On the other hand, going to a private college or university leads to higher grades, faculty contact and satisfaction for whites. The primary difference for blacks, while it does not reach significance, is the low satisfaction of students in private four-year colleges. However, for both groups, going to a private college has positive effects on attainment and goals. This advantage is greater for black students. Private universities seem particularly important in increasing long-term educational goals of black

students, though all four-year colleges are also good climates for this. Public universities do not seem to aid black student attainment or goals as they do for white students.

High per student expenditures in colleges do not increase student attainment. In fact, note that the signs of most coefficients for expenditures are negative, and the coefficient for white degree attainment is significant. Large institutional size has positive effects on white, but not black academic performance and educational goals; in fact, the signs of these coefficients are negative for blacks. Thus blacks are if anything harmed by entering large colleges, while whites are moderately helped. Vocational orientation of the college significantly lowers early persistence of black students, but not whites. However, whites who go to vocationally oriented colleges are less likely to obtain a degree, and tend to lower their long-term educational goals. These longer term effects are not found for blacks. Thus overall going to a college with many vocational major areas is less damaging to black students than to whites. The proportion of part-time students is associated with higher grades for whites, but not blacks. However, black students in such colleges have much lower faculty contact, even though they do not find such contexts particularly dissatisfying. White students are low in both faculty contact and satisfaction in such contexts. Despite these patterns, blacks who enter colleges with low student cohesion have much lower odds of persistence, odds of graduation, and goals. The magnitude of the effects is much greater than for whites. While socioeconomic composition does not affect attainment, students in schools with low SES composition do receive much higher grades. This is particularly true for blacks, and as noted above, accounts for the grade advantage of blacks in black colleges. However, only for black students, going to low SES colleges also decreases satisfaction with college. In fact, white students in low SES colleges are more satisfied. College selectivity has only one significant effect for black students: it too lowers student satisfaction. This is not true for whites. In fact, white students are significantly aided by entering selective colleges: they are higher in both persistence and graduation rates in such settings. Black students are not harmed by entering selective schools, but neither are they helped.

Role involvement.

At the individual level, a lack of involvement in the student role and corresponding involvement in family or work roles does not seem to hurt black performance and attainment, though these factors are important for whites. Only living on-campus is more influential for blacks than whites. Black student who live on campus are far more likely to have obtained degrees than those who are commuter students. Academic performance influences degree attainment and goals for both groups, though it increases early performance only for whites. On the other hand, faculty contact is almost three times as strong an influence on black as white attainment and goals for further education. This measure of social-psychological integration indicates that acceptance and communication between students and faculty is crucial for black students. It is more important than either grades or general college satisfaction.

In general, black students are most likely to persist for at least a year when they enter black colleges, with less vocational orientations and more cohesive environments. Black colleges, as well as private four-year colleges and universities also improve the odds that black students will obtain bachelor's degrees, in part due to their greater student integration and the higher grades students are able to obtain. On-campus residence, high grades, and adequate contact with faculty all increase the chances a student will persist and graduate. On the other hand, going to a public community college, with a vocational atmosphere, and low student integration helps black students only by moderately increasing their grades. Public universities and four-year colleges lead to low early grades for black students, to low satisfaction, low faculty contact, and therefore low odds of persistence and graduation.

As more black students are recruited into public universities, and as black colleges enroll lower proportions of the black student population, there are likely to be negative effects on many black students. The larger size, lower integration, and higher selectivity of public universities are apt to lead to lower grades, lower faculty contact and satisfaction. As a result, some black students who would have graduated in black colleges or other private colleges will not do so in public settings unless attempts are made to adapt to the needs of the black student population.

Table 1

Selection into Postsecondary Educational Institutions by Race

	SAT		RACE	PVOC		HALF		LSES		EXPEND		SIZE	
	B	W	B	B	W	B	W	B	W	B	W	B	W
SES	.558	2.289**	-.001	-.000	-.002**	.000	-.001**	-.001	-.002**	.024	.277**	121.783**	67.183**
MALE	1.751	2.042	.008	.011	.007	.001	.004	.004	.002	-.221	2.235**	482.909	256.570
ABIL	46.263**	38.154**	-.037	-.048**	-.035**	-.023*	-.035**	-.042**	-.017**	5.960**	3.363**	499.821	928.070**
RSPGN	-37.041**	-16.270**	.003	.059**	.042**	.020**	.0 5**	.039**	.020**	-1.149	-.866	-951 862	-367.860
RSGPA	1.663	5.873**	.005	-.003	-.007**	-.004**	-.006**	-.000	-.001	.416	.921**	167.299	229.819**
EDEXP	3.940	3.330**	-.001	-.009**	-.004**	-.005	-.001	-.002	-.001	.590	.312	16.111	100.122
OCASP	.484	.399**	-.001	-.000	-.000	-.001	-.000	-.001	-.001**	.076	.019	8.678	15.689*
PASP	-1.689	5.579**	.022	-.007	-.013**	-.003	-.013**	-.001	-.001	.723	.537	48.293	847.270**
RSRACE	2.752	2.274**	-.019*	-.002	-.002	-.005	-.009**	-.010**	-.005**	.043	-.018	-78.820	-61.652
DELAY	-.199	-8.762*	-.086*	.037**	.018**	.058	.045**	-.026	.002	.018	-.561	-933.621	257.526
a	621.890	637.790	1.865	.822	.850	.382	.523	.591	.317	79.172	78.289	8757.64	-876.080
R2	.112	.180	.020	.145	.111	.080	.116	.059	.084	.080	.074	.031	.030

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Table 2

Effects of Colleges and Role Involvement on College Experiences
Black College Entrants (N=795)
Unstandardized (Standardized) Regression Coefficients

	GPA			FAC			CSAT		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
RACE	.440**	.012	.019	.025	-.032	-.038	.072	.059	.062
	(.170)	(.005)	(.008)	(.026)	(-.033)	(-.039)	(.047)	(.039)	(.040)
PRU	-.243	.064	.076	.032	-.020	-.029	.011	.073	.062
	(-.053)	(.014)	(.016)	(.018)	(-.01)	(-.016)	(.004)	(.027)	(.023)
PR4	-.356*	-.116	-.091	.038	-.008	-.013	-.138	-.086	-.066
	(-.103)	(-.034)	(-.026)	(.029)	(-.006)	(-.010)	(-.067)	(-.042)	(-.032)
PR2	.274	.255	.265	.077	.016	.003	.049	.076	.024
	(.049)	(.046)	(.048)	(.034)	(.008)	(.001)	(.015)	(.023)	(.007)
PUBU	-.457**	-.198	-.189	-.079	-.091	-.084	-.100	-.043	-.003
	(-.155)	(-.067)	(-.064)	(-.071)	(-.081)	(-.076)	(-.057)	(-.025)	(-.002)
PUB4	-.309**	-.145	-.127	-.017	-.044	-.043	-.064	.000	.029
	(-.115)	(-.054)	(-.048)	(-.017)	(-.043)	(-.043)	(-.040)	(.000)	(.018)
EXP		-.025	-.024		-.000	.001		.017	.021
		(-.042)	(-.041)		(-.001)	(.004)		(.049)	(.061)
SIZE		-.005	-.006		-.003	-.003		-.001	- 001
		(-.041)	(-.043)		(-.070)	(-.059)		(-.016)	(-.007)
VOC		.334	.354		.106	.078		.055	-.019
		(.049)	(.051)		(.041)	(.030)		(.014)	(-.005)
HALF		.202	.169		-.291*	-.267*		.093	.033
		(.028)	(.023)		(-.107)	(-.098)		(.022)	(.008)
LSES		.918**	.848**		.004	-.041		-.330*	-.483**
		(.171)	(.167)		(.002)	(-.020)		(-.104)	(-.152)
SAT		-.015	-.013		.001	.001		-.056*	-.053
		(-.018)	(-.016)		(.004)	(.002)		(-.118)	(-.112)
MS			.004			-.000			.009
			(.008)			(-.001)			(.029)
HRS			-.024			.009			.017
			(-.024)			(.024)			(.029)
FTPT			.003			.044			-.035
			(.001)			(.027)			(-.014)
RES			-.105			.051			-.015
			(-.039)			(.052)			(-.009)
GPA						.058**			.162**
						(.154)			(.073)
FAC									.041
									(.026)
R2	.079	.100	.102	.038	.047	.071	.028	.038	.040

Table 2 (Continued)

Effects of Colleges and Role Involvement on College Experiences
White College Entrants (N=6500)
Unstandardized (Standardized) Regression Coefficients

	GPA			FAC			CSAT		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
PRU	-.268**	-.059	-.049	.058*	.022	.016	.041	-.002	-.008
	(-.050)	(-.011)	(-.009)	(.032)	(.012)	(.009)	(.016)	(-.001)	(-.003)
PR4	-.260**	-.090	-.072	.099**	.066**	.058*	.056*	.015	.004
	(-.062)	(-.022)	(-.017)	(.070)	(.047)	(.041)	(.028)	(.008)	(.002)
PR2	-.032	.052	.055	.090**	.054	.048	.104**	.062	.045
	(-.005)	(.008)	(.009)	(.043)	(.026)	(.023)	(.035)	(.021)	(.015)
PUBU	-.357**	-.277**	-.264**	-.045**	-.036	-.029	-.036	-.072*	-.043
	(-.106)	(-.082)	(-.079)	(-.040)	(-.032)	(-.025)	(-.023)	(-.045)	(-.027)
PUB4	-.267**	-.206**	-.189**	-.016	-.015	-.015	-.027	-.064*	-.049
	(-.079)	(-.061)	(-.056)	(-.014)	(-.013)	(-.013)	(-.017)	(-.039)	(-.030)
EXP		-.003	-.002		.000	.00		-.002	-.002
		(-.004)	(-.004)		(.002)	(.001)		(-.006)	(-.007)
SIZE		.006**	.006**		-.004**	-.004**		-.001	- 001
		(.043)	(.040)		(-.082)	(-.082)		(-.011)	(-.010)
VOC		.084	.090		.039	.028		.006	-.012
		(.011)	(.012)		(.016)	(.011)		(.002)	(-.004)
HALF		.303*	.204		-.158**	-.107		-.208**	-.172**
		(.037)	(.025)		(-.056)	(-.038)		(-.073)	(-.044)
LSES		.352**	.366*		.023	-.006		.175*	.132
		(.025)	(.027)		(.005)	(-.001)		(.027	(.020)
SAT		-.021	-.020		-.003	-.004		.003	.003
		(-.019)	(-.018)		(-.009)	(-.011)		(.005)	(.006)
MS			.004			.000			-.003
			(.005)			(.001)			(-.008)
HRS			-.002			-.009*			-.008
			(-.002)			(-.029)			(-.016)
FTPT			-.299**			.115**			.017
			(-.058)			(.066)			(.007)
RES			-.050			.048			.059**
			(-.019)			(.047)			(.041)
GPA						.062**			.113**
						(.183)			(.237)
FAC									.136*
									(.097)
R2	.190	.194*	.197*	.039	.047*	.080*	.021	.023	.086*

Table 3

Effects of Colleges, Role Involvement and Experiences on Educational Outcomes
Black College Entrants (N=795)
Unstandardized (Standardized) Regression Coefficients

	P2			BA			EDGOAL		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
RACE	.087**	.043	.043	.121**	.082	.828	.045	-.075	-.057
	(.087)	(.043)	(.042)	(.119)	(.080)	(.080)	(.015)	(-.015)	(-.017)
PRU	.109	-.044	-.042	.193**	.091	.089	.791**	.526*	.534*
	(.061)	(-.025	(-.023)	(.105)	(.050)	(.049)	(.148)	(.099)	(.100)
PR4	.028	-.103	-.101	.113*	.021	.001	.392*	.144	.144
	(.021)	(-.077)	(-.076)	(.083)	(.015)	(.000)	(.098)	(.036)	(.036)
PR2	.043	-.035	-.026	-.067	-.140	-.127	.151	-.024	-.021
	(.020)	(-.016)	(-.012)	(-.031)	(-.064)	(-.058)	(.024)	(-.041)	(-.003)
PUBU	.066	-.045	-.039	.080	.014	.019	.153	.032	.078
	(.058	(-.039)	(-.034)	(.083)	(.012)	(.016)	(.045)	(.009)	(.023)
PUB4	.055	-.038	-.035	.049	-.023	-.032	.371**	.271	.231
	(.054)	(-.036)	(-.034)	(.046)	(-.022)	(-.030)	(.120)	(.069)	(.075)
EXP		-.006	-.006		-.002	-.002		.045	.047
		(-.026)	(-.028)		(-.020)	(-.010)		(.069)	(.069)
SIZE		-.003	-.003		-.002	-.000		-.007	- 002
		(-.070)	(-.060)		(-.039)	(-.000)		(-.045)	(-.016)
VOC		-.291*	-.293**		.027	.005		.313	.216
		(-.110)	(-.111)		(.009)	(.002)		(.039)	(.033)
HALF		-.335**	-.270*		-.389**	-.199		-.885*	-.583
		(-.121)	(-.097)		(-.137)	(-.069)		(-.107)	(-.070)
LSES		.008	.106		.027	-.001		.104	.002
		(.004)	(.008)		(.013)	(-.000)		(.017)	(.000)
SAT		.002	.002		.009	.004		.027	.022
		(.006)	(.005)		(.029)	(.012)		(.029)	(.024)
MS			-.005			-.007			-.005
			(-.024)			(-.032)			(-.009)
HRS			-.010			-.019			-.065
			(-.024)			(-.052)			(-.057)
FTPT			.075			.055			-.109
			(.046)			(.033)			(-.022)
RES			—			.161**			.199
			—			(.155)			(.066)
GPA			-.004			.046**			.125**
			(-.010)			(.116)			(.108)
FAC			.109**			.142**			.421**
			(.107)			(.135)			(.138)
CSAT			.012			-.041			-.060
			(.018)			(-.061)			(-.031)
R2	.115	.134	.150	.163	.173	.232	.137	.150	.159

Table 3 (Continued)

Effects of Colleges, Role Involvement and Experiences on Educational Outcomes
White College Entrants (N=6500)
Unstandardized (Standardized) Regression Coefficients

	P2			BA			EDGOAL		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
PRU	.021	-.009	-.015	.193**	.065*	.050	.326**	.204*	.194*
	(.012)	(-.005)	(-.009)	(.101)	(.034)	(.026)	(.057)	(.036)	(.034)
PR4	.048**	.024	.013	.278**	.068**	.045	.282**	.178*	.156*
	(.037)	(.018	(.010	(.119)	(.045)	(.030)	(.059)	(.040)	(.035)
PR2	-.006	-.014	-.020	.054*	-.007	-.019	.064	.023	.001
	(.003)	(-.007)	(-.010)	(.024)	(-.003)	(-.009)	(.010)	(.003)	(.000)
PUBU	.050**	.035	.032	.139**	.043*	.042*	.181**	.034	.061
	(.048	(.033)	(.030)	(.115)	(.035)	(.035)	(.050)	(.009)	(.017)
PUB4	.031*	.016	.012	.145**	.069**	.061**	.172**	.05[illegible]	.071
	(.029)	(.015)	(.011)	(.119)	(.057)	(.050)	(.047)	(.016)	(.020)
EXP		-.004	-.003		-.007*	-.008*		.001	.001
		(-.019)	(-.016)		(-.031)	(-.033)		(.002)	(.002)
SIZE		-.001	-.000		-.001	-.001		.004*	.005*
		(-.015)	(-.005)		(-.014)	(-.004)		(.027)	(.030)
VOC		.053	.043		-.111**	-.126**		-.280**	-.308**
		(.023)	(.019)		(-.042)	(-.048)		(-.036)	(-.039)
HALF		-.106**	.019		-.246**	-.129**		-.098	.036
		(-.041)	(-.017)		(-.083)	(-.044)		(-.011)	(.004)
LSES		.039	-.002		.073	.038		.314	.231
		(.009)	(-.003)		(.015)	(.008)		(.021)	(.016)
SAT		.014*	.011*		.022**	.019**		.023	.022
		(.040)	(.031)		(.056)	(.046)		(.019)	(.018)
MS			-.010**			-.003			-.002
			(-.037)			(-.009)			(-.002)
HRS			-.030**			-.027**			-.029*
			(-.095)			(-.075)			(-.027)
FTPT			.113**			.122**			.263**
			(.070)			(.066)			(.047)
RES			--			.073**			.054
			--			(.068)			(.017)
GPA			.008*			.038**			.132*
			(.027)			(.106)			(.123)
FAC			.039*			.054**			.168*
			(.042)			(.051)			(.053)
CSAT			.051*			.042**			.052*
			(.077)			(.056)			(.023)
R2	.113	.115	.144*	.213	.221*	.256*	.155	.157*	.179*

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